# **BOG TURTLES AND NEW US 301**

# RARE, THREATENED AND ENDANGERED SPECIES

Rare, threatened, and endangered (RTE) species are wildlife and plant species that are in danger of extinction, and are protected under the Federal Endangered Species Act, and Title 7 of the Annotated Delaware Code. Potential effects to RTE species and their habitat must be considered in transportation project decision-making. Working closely with Delaware Department of Natural Resources and Environmental Control (DNREC) and the US Fish and Wildlife Service (USFWS), DelDOT has identified the Bog Turtle as the only RTE species that potentially exists within the US 301 project area.

### THE BOG TURTLE - A POTENTIAL RTE IN THE PROJECT AREA

The bog turtle (*Clemmys muhlenbergii*) exists within New Castle County and potentially within the project area. Bog turtles and their habitat are identified through a two-step process:

**Phase I Survey** identifies potential bog turtle habitat areas within existing wetland systems. (Note: Phase I Surveys do not determine the presence of bog turtles)

- 133 wetlands investigated from April to October 2005
- Potential habitat areas have been identified along each of the four Retained Alternative's alignments

**Phase II/III Surveys** determine if bog turtles exist in habitat areas identified during phase I surveys. Surveys were conducted in potential habitats along the alignment of each Retained Alternative.

- Surveys were conducted by state-approved bog turtle surveyors
- Phase II surveys consist of conducting 4 separate site visits to each habitat and spending 6 person hours per acre searching for turtles.
   Surface basking areas, areas under dead vegetation, areas within shallow muck, and tunnels within the wetland mud were examined.
- Phase III surveys consist of setting traps to capture turtles as they
  move through habitat areas. Traps were located in likely travel
  corridors or as drift fence trap arrays by an approved bog turtle
  trapper.
- Surveys were completed by July 2006.
- No bog turtles were captured during phase II/III surveys

Bog Turtle Habitats in the Project Area are Considered Potentially Occupied Habitats identified in the surveys are considered potentially occupied by bog turtles for the following reasons:

- Historical records indicate bog turtles were present in the project area in the last 40 years.
- A bog turtle can live longer than 40 years.
- Negative phase II/III surveys cannot prove the bog turtle is absent from an area.

# **Findings**

Preliminary effect analysis and USFWS consultation indicate that each of the retained alternatives has similar but not identical potential to affect the bog turtle. It has also been determined that none of the retained alternatives have a fatal flaw from a bog turtle protection perspective. In other words, the bog turtle effects will not be the deciding factor in determining which alternative is identified as DelDOT's recommended preferred alternative. Protection of the bog turtle will remain one of the many factors that DelDOT will consider when recommending a preferred alternative.

# Potential Bog Turtle Effects will be evaluated

 A biological assessment will be prepared to evaluate the potential effects of DelDOT's recommended preferred alternative on the bog turtle. This assessment is part of the informal RTE consultation process. This assessment will be coordinated closely with USFWS and DNREC and will be referenced in the Final Environmental Impact Statement.